

## KEVIN P. SCHEIBE, Ph.D.

*Union Pacific Professor of Information Systems*

Iowa State University • Ivy College of Business

Department of Information Systems and Business Analytics

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### EDUCATION

- Pamplin College of Business, Virginia Polytechnic Institute and State University May 2003  
**Ph.D., Business Information Technology**
- California State University, San Marcos Dec 1998  
**Master of Business Administration**
- Biola University Jun 1991  
**B.S., Computer Science**

### RESEARCH EXPERTISE

- Business Analytics
  - Decision Support Systems
  - Location Analytics
  - Privacy and Security
  - Supply Chain
    - Risk
    - Technology
- Wireless network optimization
  - Geographic Information Systems

### TEACHING EXPERTISE

- Management Information Systems
- Business Analytics

### ACADEMIC EXPERIENCE

- Chair, Department of Information Systems and Business Analytics 2019–present
- Union Pacific Professor of Information Systems 2021–present
- Thome Professor in Business and Professor of Information Systems and Business Analytics 2019–2021
- Kingland Faculty Fellow in Business Analytics and Associate Professor of Management Information Systems, Department of Supply Chain and Information Systems, Iowa State University 2017–2019
- Visiting Faculty, Consortium Institute of Management and Business Analysis (administered by the University of Iowa for the Consortium of Universities for International Studies), Paderno del Grappa, Italy Spring 2012
- Associate Professor of Management Information Systems, Department of Supply Chain and Information Systems, Iowa State University 2009–2017

- Assistant Professor of Management Information Systems, Department of Logistics, Operations and Management Information Systems, Iowa State University 2003–2009
- Graduate Assistant, Department of Business Information Technology, Virginia Polytechnic Institute and State University 1999–2003

**REFEREED JOURNAL ARTICLES** (\*\* denotes current or former graduate student co-author)

1. **Scheibe, K.P.**, Mukandwal, P.S., and Grawe, S.J. (2022). “The Effect of Transactive Memory Systems on Supply Chain Network Collaboration,” *International Journal of Physical Distribution & Logistics Management*, Volume 52, Issue 9/10, pp. 791-812.
2. Park, Y.W., Blackhurst, J., \*\*Paul, C., & **Scheibe, K.P.** (2021). “An Analysis of the Ripple Effect for Disruptions Occurring in Circular Flows of a Supply Chain Network,” *International Journal of Production Research*, Volume 60, Issue 15, pp. 4693-4711.
3. \*\*Paul, C., Hosack, B., & **Scheibe, K.P.** (2020). “A Brief History of the Midwest Association for Information Systems: 2005-2020,” *Journal of the Midwest Association for Information Systems* | Volume 2020, Issue 1, pp. 45-55.
4. **Scheibe, K.P.**, Nilakanta, S., Ragsdale, C.T., and Younie, B. (2019). “An Evidence-based Management Framework for Business Analytics,” *Journal of Business Analytics*, Volume 2, Issue 1, pp. 47-62.
5. Zhao, K., **Scheibe, K.P.**, Blackhurst, J., and Kumar, A. (2019). “Supply Chain Network Robustness against Disruptions: Topological Analysis, Measurement, and Optimization,” *IEEE Transactions on Engineering Management*, Volume 66, Issue 1, pp. 127-139.
6. George, J.F., **Scheibe, K.P.**, Townsend, A.M., and Mennecke, B. (2018). “The Amorphous Nature of Agile: No One Size Fits All,” *Journal of Systems and Information Technology*, Volume 20, Issue 2, pp. 241-260. **Outstanding Paper in the 2019 Emerald Literati Awards.**
7. Davazdahemami, B., \*\*Luse, A., **Scheibe, K.P.**, and Townsend, A.M. (2018). “Training, Self-Efficacy, and Performance; a Replication Study,” *AIS Transactions on Replication Research*, Volume 4, Article 3.
8. Blackhurst, J., Rungtusanatham, M.J., **Scheibe, K.P.**, \*\*Ambulkar, S. (2018). “Supply chain vulnerability assessment: A network based visualization and clustering analysis approach,” *Journal of Purchasing and Supply Management*, Volume 24, Issue 1, pp. 21-30.
9. **Scheibe, K.P.** and Blackhurst, J. (2017). “Supply Chain Disruption Propagation: A Systemic Risk and Normal Accident Theory Perspective,” *International Journal of Production Research*, Volume 56, Issue 1-2, pp. 42-59. **Highest cited paper in 2018 in IJPR.**

10. **Scheibe, K.P.** and **\*\*Gupta, M.**, (2017). "The Effect of Socialization via Computer-Mediated Communication on the Relationship between Organizational Culture and Organizational Creativity," *Communications of the Association for Information Systems*, Volume 40, Article 13.
11. Jiang, Z, **Scheibe, K.P.**, Nilakanta, S., and Qu, X. (2017). "The Economics of Public Beta Testing," *Decision Sciences Journal*, Volume 48, Issue 1, pp. 150-175.
12. Martens, B.J., **Scheibe, K.P.**, and Bergey, P.K. (2012). "Supply chains in sub-Saharan Africa: A decision support system for small-scale seed entrepreneurs," *Decision Sciences Journal*, Volume 43, Issue 5, pp. 737-759.
13. Morrow, P.C., McElroy, J.C., and **Scheibe, K.P.** (2012). "Influencing Organizational Commitment through Office Redesign," *Journal of Vocational Behavior*, Volume 81, Issue 1, pp. 99-111.
14. Morrow, P.C., McElroy, J.C., and **Scheibe, K.P.** (2011). "The Adverse Effects of Perceived Work Unit Incivility on Job Satisfaction and Total Quality Management," *Transportation Research, Part E*, Volume 47, Issue 6, pp. 1210-1220.
15. **\*\*Luse, A.**, **Scheibe, K.P.**, and Townsend, A.M. (2009). "Addressing Internal Security Threats with Roaming User-Based Distributed Firewalls," *Journal of Information Systems Security*, Volume 5, Issue 2, pp. 26-41.
16. **Scheibe, K.P.** and Ragsdale, C.T. (2009). "A Model for the Capacitated, Hop-Constrained, Per-Packet Wireless Mesh Network Design Problem," *European Journal of Operational Research*, Volume 197, Issue 2, pp. 773-784.
17. **Scheibe, K.P.**, McElroy, J.C., and Morrow, P.C. (2009). "Object Language and Impression Management: How to use technology and other objects to improve the IT employee image," *Communications of the ACM*, Volume 53, Issue 4, pp. 129-131.
18. **Scheibe, K.P.**, Rees, L.P., and Rakes, T.R. (2009). "Addressing Universal-Broadband-Service Implications with Wireless Mesh Networks," *Telecommunication Systems*, Volume 41, Issue 1, pp. 51-64.
19. **\*\*Luse, A.**, Townsend, A.M., and **Scheibe, K.P.** (2008). "Software Implementation of Hardware-Based Encryption for Secure Content Delivery," *Journal of Information Warfare*, Volume 7, Issue 2.
20. Ragsdale, C.T., **Scheibe, K.P.**, and Trick, M.A. (2008). "Fashioning Fair Foursomes for the Fairways (Using a Spreadsheet-based DSS as the Driver)," *Decision Support Systems*, Volume 45, Issue 4, pp. 997-1006.
21. Nilakanta, S., **Scheibe, K.P.**, and Rai, A. (2008). "Dimensional Issues in Agricultural Data Warehouse Designs," *Computers and Electronics in Agriculture*, Volume 60, Issue 2, pp. 263-278.

22. Blackhurst, J., **Scheibe, K.P.**, and Johnson, D.J. (2008). "Supplier Risk Assessment and Monitoring for the Automotive Industry," *International Journal of Physical Distribution and Logistics Management*, Volume 38, Issue 2, pp. 143-165.
23. \*\*Luse, A., **Scheibe, K.P.**, and Townsend, A.M. (2008). "A Component-based Framework for Visualization of Intrusion Detection Events," *Information Systems Security*, Volume 17, Issue 2, pp. 95-107.
24. **Scheibe, K.P.**, Mennecke, B.E., and \*\*Luse, A. (2007). "The Role of Effective Modeling in the Development of Self-Efficacy: The Case of the Transparent Engine," *Decision Sciences Journal of Innovative Education*, Volume 5, Issue 1, pp. 21-42.
25. McElroy, J.C., **Scheibe, K.P.**, and Morrow, P.C. (2007). "Technology as Object Language: Revisiting Office Design," *Computers in Human Behavior*, Volume 23, Issue 5, pp. 2429-2454.
26. **Scheibe, K.P.**, Carstensen, L.W., Rakes, T.R., and Rees, L.P. (2006). "Going the Last Mile: a Spatial Decision Support System for Wireless Broadband Communications," *Decision Support Systems*, Volume 42, Issue 2, pp. 557-570.
27. **Scheibe, K.P.**, Mennecke, B.M., and Zobel, C. (2006). "Creating Offshore Ready IT Professionals: The Need for a Global Perspective and Strong Collaborative Skills," *Journal of Labor Research*, Summer, Volume 27, Issue 3, pp. 275-290.
28. Nilakanta, S. and **Scheibe, K.P.** (2005). "The Digital Persona and Trust Bank: A Privacy Management Framework," *Journal of Information Privacy and Security*, Volume 1, Issue 4, pp. 3-21.

## BOOK CHAPTERS

1. **Scheibe, K.P.** and Blackhurst J., "Systemic Risk and the Ripple Effect in the Supply Chain," in *Handbook of Ripple Effects in the Supply Chain*, D. Ivanov, A. Dolgui and B. Sokolov (Eds.), Springer's International Series in Operations Research and Management Science, (Forthcoming).
2. Luse, A., Townsend A.M., and **Scheibe, K.P.**, "Firewalls: Continuing Solutions for Network Security," In *Handbook of Research on Information Security and Assurance*, J.N.D. Gupta and K. Sharma (Eds.), IGI Global, Hershey, PA, 2008.

## CONFERENCE PROCEEDINGS

1. Ko, M., Paul, C., and **Scheibe, K.P.**, "Why Not Let Users Speak with Photos? An Experiment Investigating the Mechanism of Multimodal Reviews (Text & Image) on Purchase Intention," Proceedings of the America's Conference on Information Systems, Minneapolis, MN, August 10-14, 2022.
2. Jeong, H D, Shane, J, **Scheibe, K.P.**, Nilakanta, S., and Alikhani, H., "Optimizing Maintenance Equipment Life-Cycle for Local Agencies," Proceedings of the 99<sup>th</sup> Annual Meeting of the

Transportation Research Board, Washington, D.C., January 12-16, 2020.

3. Paul, C., Nilakanta, S., and **Scheibe, K.P.**, “Privacy Concerns Regarding Wearable IoT devices: How it is influenced by GDPR,” Proceedings of the 53<sup>rd</sup> Annual Hawaii International Conference on System Sciences, Maui, HI, January 7-10, 2020.
4. Griffis, B., Rose, W., and **Scheibe, K.P.**, “Urban Logistics: Drivers and Factors of Strategy Change,” Proceedings of the 50<sup>th</sup> Annual Decision Sciences Institute Conference, New Orleans, LA, November 23-25, 2019.
5. Paul, C., Nilakanta, S., and **Scheibe, K.P.**, “Mitigating Privacy Concerns Regarding Wearable IoT devices – How it is influenced by GDPR and Privacy Policies,” Proceedings of the 50<sup>th</sup> Annual Decision Sciences Institute Conference, New Orleans, LA, November 23-25, 2019.
6. Ellis, S., **Scheibe, K.P.**, and Blackhurst, J., “The Direct and Indirect Effects of Cross-Functional Transactive Memory System Alignment on Supply Chain Disruptions,” Proceedings of the 30<sup>th</sup> Annual POMS Meeting, Washington D.C., May 2-6, 2019.
7. Pahng, P., Howe, M., Summers, J., and **Scheibe, K.P.**, “Tattoos are Forever: Potential Selection Effects of Job Applicant Tattoos,” Proceedings of the 78<sup>th</sup> Annual Meeting of the Academy of Management, Chicago, IL, August 10-14, 2018.
8. Baumann, S., Eulenstein, O., **Scheibe, K.P.**, Wunck, C., “Supply Interrupted: Detecting Hot Spots in Multi-Tier Supply Networks for Resiliency Risk Management,” Proceedings of POMS 28<sup>th</sup> Annual Conference, Seattle, WA, May 5-8, 2017. (Authors listed alphabetically)
9. Baumann, S., Eulenstein, O., **Scheibe, K.P.**, Wunck, C., “Improving Resiliency in Value Creation Architectures Through Hot Spot Detection and Contingency Planning,” Proceedings of 8<sup>th</sup> Annual Conference of the European Decision Sciences Institute, Granada, Spain, May 29 – June 1, 2017. (Authors listed alphabetically)
10. Howe, M., Summers, J., **Scheibe, K.P.**, DeMarie, S., Mejia, S.C., and Pahng, P., “Tattoos are Forever: Potential Selection Effects of Job Applicant Tattoos,” Proceedings of the Southern Management Association Annual Meeting, St. Pete Beach, Florida, October 24-28, 2017.
11. **Scheibe, K.P.**, Ragsdale, C.T., and Blackhurst, J., “A Quasi-Robust-Optimization Approach to Big Data Regression,” Proceedings of the Decision Sciences Institute Annual Meeting, Seattle, WA, 2015.
12. Jiang, Z., **Scheibe, K.P.**, and Nilakanta, S., “The economic impact of public beta testing: The power of word-of-mouth,” Proceedings of the International Conference on Information Systems Annual Meeting, Shanghai, China, December 4-7, 2011.
13. Ragsdale, C.T. and **Scheibe, K.P.**, “Creating Fair Foursomes for a University Donor Golf Tournament,” Proceedings of the Southeast Decision Sciences Institute Annual Meeting, Orlando, FL, February 20-22, 2008.

14. Rai, A., Nilakanta, S., and **Scheibe, K.P.** "Indian Agricultural Data Warehouse Design," Proceedings of Information Resources Management Association, Vancouver, British Columbia, Canada, 2007.
15. Rakes, T., Rees, L.P., and **Scheibe, K.P.**, "A Coverage Model for Topology Design in Wireless Mesh Networks," Proceedings of the Decision Sciences Institute Annual Meeting, San Diego, CA, 2002.
16. Dong, X., Liu, Y., LoPinto, F.A., **Scheibe, K.P.**, and Sheetz, S.D., "Information Model for Power Equipment Diagnosis and Maintenance," Proceedings of Power Engineering Society Winter Meeting, New York, 2002, pp.701-706.
17. **Scheibe, K.P.**, "A Comparative Analysis of Heuristic Techniques for Estimating the Parameters for a Nonlinear Time Series Model," Proceedings of the Thirty-Seventh Annual Meeting of Southeastern INFORMS, Myrtle Beach, SC, October 4-5, 2001, pp. 1056-1063.
18. **Scheibe, K.P.**, "Non-Standard Methods for Simulation Optimization Including Nonparametric Regression, Metamodeling and Knowledge-Based Approaches," Proceedings of the Thirty-First Annual Meeting of Southeast Decision Sciences Institute, Charlotte, NC, February 21-23, 2001, pp. 334-336.

#### CONFERENCE PRESENTATIONS

1. Ragsdale, C.T., Cochran, J., Klimberg, R., and **Scheibe, K.P.**, "Encouraging Professionalism in the Classroom," Panel Discussion at INFORMS Annual Meeting, Philadelphia, PA, November 1-3, 2015.
2. Ragsdale, C.T., and **Scheibe, K.P.**, "Scheduling Progressive Dinners for Maximal Effect," Presentation at the Decision Sciences Institute annual meeting, Boston, MA, November 18-22, 2011.
3. Blackhurst, J., **Scheibe, K.P.**, Padakala, B., and Ragsdale, C.T., "Supply Chain Risk Decision Making: An Organizational Learning Perspective", Invited fellow's presentation at the Decision Sciences Institute annual meeting, San Diego, CA, November 19-23, 2010.
4. Deane, J., Rakes, T., Rees, L.P., and **Scheibe, K.P.**, "Heuristic and Metaheuristic Solutions to the Wireless Network Tower Placement Problem," Presentation at the Institute for Operations Research and the Management Sciences Annual Conference, Seattle, WA, November 4-7, 2007.
5. Ragsdale, C.T. and **Scheibe, K.P.**, "Fashioning Fair Foursomes for the Fairway," INFORMS Annual Meeting, Pittsburg, PA, November 5-8, 2006.
6. Blackhurst, J., Johnson, D.J., and **Scheibe, K.P.**, "Development of a Supplier Risk Assessment Framework and Prototype System," Presentation at the 17th Annual Conference of POMS, Boston, Massachusetts, April 28-May1, 2006.

7. “Designing and Delivering Successful Spreadsheet-based DSS Courses,” Thirty-Fifty Annual Meeting of the Decision Sciences Institute, Boston, MA, November 20-23, 2004.
8. “From Decision Models to Decision Support: Excel with VBA,” Thirty-First Annual Meeting of Southeast Decision Sciences Institute, Charlotte, NC, February 21-23, 2001.

## RESEARCH REPORTS

1. Jeong, H D PI, Shane, J PI, **Scheibe, K.P.** Co-PI, Nilakanta, S., and Alikhani, H. (2019). “Optimizing Maintenance Equipment Life-Cycle for Local Agencies,” Sponsor: Iowa Highway Research Board and Iowa Department of Transportation.
2. **Scheibe, K.P.** PI, Nilakanta, S. Co-PI., Ragsdale, C.T., (2017). “A Decision Support System for Optimized Equipment Turnover,” Sponsor: Federal Highway Administration and Iowa Department of Transportation.

## INVITED, NON-PEER REVIEWED PAPERS AND PRESENTATIONS

1. Bansal, G., Buche, M., Il-Gayar, O., George, J., Germonprez, M., Gau, Y., Hadidi, R., Khazanchi, D., Klein, B., Ponelis, S., **Scheibe, K.**, Schiller, S., and Strader, T. (2021). “Remembering Daniel Joseph Power,” *Journal of the Midwest Association for Information Systems*, Volume 2021, Issue 2, pp. 1-4.
2. Power, D.J., Hadidi, R., and **Scheibe, K.P.** (2016). “Editor’s Comments: Celebrating 50 Years of Management Information Systems (MIS) Research and Teaching,” *Journal of the Midwest Association for Information Systems*, Volume 2016, Issue 2, pp. 1-5.
3. Supply Chain Risk Decision Making: An Organizational Learning Perspective. February 2011. APICS Central Iowa Chapter Meeting, Ames, IA.

## FUNDED RESEARCH AND GRANT AWARDS (Funded: \$759,191 – excluding Ivy CoB grants)

1. Scheibe, K.P., and Zhang, Z., “Business Analytics in Government,” Research Project Number: 018647-00001, Funded by the Iowa Department of Transportation, Granted \$30,000. Co-PI.
2. Jeong, H.D., Shane, J., **Scheibe, K.P.**, and Nilakanta, S., “Optimizing Maintenance Equipment Life Cycle for Local Agencies,” Research Project Number: IHRB-16-06, Funded by the Iowa Highway Research Board, Granted \$172,590. Co-PI.
3. \$7,000 – ISU College of Business, Summer Research Award, 2017
4. **Scheibe, K.P.**, and Nilakanta, S., “A Decision Support System for Optimized Equipment Turnover,” Funded by the Iowa Department of Transportation, Granted \$69,422. PI.
5. Nilakanta, S., **Scheibe, K.P.**, Boysen, P., Nilakanta, R., Heer, R., and Hassall, L., “Enhancing Academic Success: Use of an Immersive Collaborative Learning Environment to Redesign the Capstone Course,” Miller Faculty Fellowship, Iowa State University, April 3, 2008, Granted \$27,179. Co-PI.

6. Hendrickson, A., Townsend, A., Mennecke, B., and **Scheibe, K.P.** “A Proposal to Identify and Model System Requirements for Forensics Laboratory Information Management Systems,” Midwest Forensic Resource Center, December 5, 2003, Granted \$230,000. Co-PI.
7. Hendrickson, A., Townsend, A., Mennecke, B., and **Scheibe, K.P.** “Feasibility and Proof of Concept of Utilizing Radio Frequency Identification Tagging Technology to Manage Evidentiary Materials in Forensic Laboratories,” Midwest Forensic Resource Center, December 5, 2003, Granted \$230,000. Co-PI.

## **PhD STUDENT COMMITTEES**

1. Paul, Chinju, “The Dark Side of Information Systems Use: Three Essays,” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Spring 2022, Chair. (Placed at Mississippi State University).
2. Kang, Sung-Mo, “Sending Signals: The Effect of Voice Endorsement Disparity on Team Effectiveness,” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Spring 2022, Member.
3. Voitenko, Alexander, “Perception of Software Quality within an Agriculture Company,” Thesis for Doctor of Philosophy in Human Computer Interaction, Iowa State University. Completed Spring 2021, Chair.
4. Nehme, Alaa, “Coping with information security fear appeals: A drive theory perspective,” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Spring 2021, Member.
5. Ray, Argha, “Societal impact of technologies,” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Spring 2021, Member.
6. Lan, Bo, “Traveling Salesman Problem with time windows and drones (TSPTWD),” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Summer 2020, Member.
7. Mirsadikov, Akmal, “Determining indicators of deception in computer mediated communication using eye tracking,” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Summer 2018, Member.
8. Choi, Inmyung, “Information technology, competition, and their impact on firm performance: Theoretical development and empirical analyses,” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Summer 2017, Member.
9. Cortes, David, “The vehicle routing problem and its intersection with cross-docking,” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Spring 2017, Member.
10. Gupta, Manjul, “Information Systems in the 21st Century: Culture, Agility and Big Data,” Thesis for Doctor of Philosophy in Business, Iowa State University. Completed Spring 2015, Member.



11. Cordes, Christofer Sean, "Impact of Process Protocol Design on Virtual Team Effectiveness," Thesis for Doctor of Philosophy in Computer Human Interaction, Iowa State University, Completed Spring 2013, Member
12. Tannian, Mark, "Business impact visualization for information security and compliance," Thesis for Doctor of Philosophy in Computer Engineering, Iowa State University. Completed Spring 2013, Member.
13. Alexander, Marcus. "Ethnic-Identity Intensity as a Moderator of the Technology Acceptance Model and Its Antecedents," Thesis for Doctor of Philosophy in Human Computer Interaction, Iowa State University. Completed Spring 2008, Member
14. Colvin, Helen. "The acceptance of domestic technology: TAM as applied to a proposed classification scheme," Thesis for Doctor of Philosophy in Human Computer Interaction, Iowa State University. Completed Spring 2008, Member.
15. Hategekimana, Claver, "Cognition and Technology: Effectiveness of Intelligent Tutoring Systems for Software Training," Thesis for Doctor of Philosophy in Human Computer Interaction, Completed Fall 2008, Member.

#### **MASTER'S STUDENT COMMITTEES**

1. Almehaimeed, Eman, "Strengths, Opportunities, and Areas of Improvements for Maroof Platform in Saudia Arabia," Creative component for Master of Science in Human Computer Interaction, Completed Summer 2020, Chair.
2. Chadive, Bhavana, "Understanding the impact of Academic Climate on STEM dissertator's interest in faculty careers using data management and visualization techniques," Creative component for Master of Science in Information Systems, Completed Fall 2018, Member.
3. Trimble, Robert, "Spatial Identification for Roadway and Intersection Crashes in Iowa," Creative component for Master of Science in Information Systems, Completed Fall 2018, Co-chair.
4. Ibarra Camou, Inigo, "Argentina biofuels industry evolution and impacts on its value chain," Creative component for Master of Seed Technology and Business, Completed Summer 2018, Member.
5. Schindel, Karl, "An analysis of implementing an ERP system in a higher education institution," Creative component for Master of Science in Information Systems, Completed Summer 2018, Chair.
6. Fang, Felicia, "Replacement Model and Reliability Analysis on Wheel Loaders in Iowa DOT," Creative component for Master of Science in Information Systems, Completed Spring 2018, Co-chair.
7. Pei, Mary, "A Capability Maturity Model for Iowa DOT's Performance Data Management," Creative component for Master of Science in Information Systems, Completed Spring 2018,

Chair.

8. Chevuri, Deepti, "Auto extraction of descriptive metadata – A generative statistical model with covariance scoring," Creative component for Master of Science in Information Systems, Completed Spring 2017, Member.
9. Chiluvuru, Pranay, "Measuring the effectiveness of CRM and analyzing its importance in student recruiting," Creative component for Master of Science in Information Systems, Completed Fall 2016, Member.
10. Masana, Phinandra, "Topics Extraction from Students' Literature with ICA, LDA, and Trend Analysis," Creative component for Master of Science in Information Systems, Completed Fall 2016, Co-chair.
11. Subhas, Vani, "Recurrence Repair Event Analysis of Iowa DOT Data," Creative component for Master of Science in Information Systems, Completed Fall 2016, Co-chair.
12. Rawat, Akanksha, "Analyzing the United States Labor Condition Applications (LCA) Data of Highly Skilled Foreign Workers and Their Salaries using Tableau Visualization," Creative component for Master of Science in Information Systems, Completed Summer 2016, Co-chair.
13. Moguloju, Rajesh, "Analyzing Student Data to Improve the Effectiveness of Iowa State University's CRM," Creative component for Master of Science in Information Systems, Completed Summer 2016, Co-chair.
14. Damalchervu, Krishna, "Analysis of Visual Cues at Crossings, in Combination with the Primary Factors Contributing to Fatalities in Highway-rail Accidents and Factors Affecting 'Did Not Stop' Accidents," Creative component for Master of Science in Information Systems, Completed Summer 2016, Member.
15. Kondapalli, Manasa, "Reexamining the Implementation of the Lean Applications to Mitigate the July Effect: Using Word Cloud Method to Prioritize the Factors that Cause the July Effect," Creative component for Master of Science in Information Systems, Completed Summer 2016, Member.
16. Khosa, Nemisha, "How Personality Affects Victim's Response to Cyberbullying," Creative component for Master of Science in Information Systems, Completed Summer 2016, Member.
17. Lee, Grace Jieun, "Cluster Analysis and Support Vector Machine Classification for Resident Freshmen Applicants," Creative component for Master of Science in Information Systems, Completed Summer 2016, Chair.
18. Guntuka, Laharish, "A Literature Review on Vaporware," Creative component for Master of Science in Information Systems, Completed Summer 2016, Member.

19. Taneeru, Anil, "Determining the Causes behind Federal Rail Road Accidents: Using Text Mining and Topic Modeling in R," Creative component for Master of Science in Information Systems, Completed Summer 2016, Member.
20. Tanksley, Charles, "Effect of GSS Avatar Gender Clues on Perception of Idea Quality," Creative component for Master of Science in Information Systems, Completed Summer 2016, Chair.
21. Heims, Matthew, "Enhanced Soybean Quality Analysis for Improved Supply Chain Management Decisions," Creative component for Master of Science in Seed Technology and Business, Completed Summer 2016, Member.
22. Ashrita, Adrija, "Feasibility Study of the Data Visualization Project for Office of Student Financial Aid Using Tableau Analytics," Creative component for Master of Science in Information Systems, Completed Spring 2016, Member.
23. Acharya, Apoorva, "Predicting Repair and Maintenance Behavior of Vehicles," Creative component for Master of Science in Information Systems, Completed Fall 2015, co-Chair.
24. Saw, Jonathan, "Reprice at Supply Chain Pace," Creative component for Master of Science in Information Systems, Completed Fall 2015, Member.
25. Riley, Kimberly, "A machine learning approach to pattern discovery in server logs," Creative component for Master of Science in Information Systems, Completed Fall 2015, Chair.
26. Rangaraju, Prabhu, "L1 Norm Optimization on Big Data: Study and Analysis," Creative component for Master of Science in Information Systems, Completed Spring 2014, Chair.
27. Hu, Lei, "A Comparison of Methods for Numerical Attribute Reconciliation in data Integration," Creative component for Master of Science in Information Systems, Completed Spring 2014, Member.
28. Espinosa, Patricio, "Facebook Features and Motivations: A Comparison between US and Ecuadorian College Students," Creative component for Master of Science in Information Systems, Completed Spring 2013, Chair.
29. Perett, Jesse, "A Study of Social Influences and Information Security," Creative Component for Master of Science in Information Assurance, Iowa State University. Completed Spring 2013, Member.
30. Yang, Fan, "Information Security as Strategic Capability for Competitive Advantage," Creative component for Master of Science in Information Systems, Completed Spring 2013, Chair.
31. Yan, Meiguan, "Facebook Data Availability and Implications: A Review," Creative component for Master of Science in Information Systems, Completed Fall 2011, Chair.

32. Kang, Hyun, "Critical success factors in implementing process-oriented knowledge management systems (PKMS) in the public sector in Korea," Creative component for Master of Science in Information Systems, Completed Fall 2011, Member.
33. Cho, Sung Teck, "A Grand Strategy Framework for Green IT in Organizations," Creative component for Master of Science in Information Systems, Completed Fall 2010, Chair.
34. Roots, Kurt, "Improving Model Accuracy through Preprocessing in the Predictive Model Markup Language," Creative component for Master of Science in Information Systems, Completed Fall 2010, Member.
35. Varghese, Preetham, "Cross Application Development and the Supply Chain," Creative component for Master of Science in Information Systems, Completed Fall 2010, Member.
36. McBride, Kris, "A Case for Virtualization: A Look at Server Virtualization for Information Technology Services at Iowa State University," Creative component for Master of Science in Information Systems. Completed Spring 2009, Chair.
37. Thomas, David. "Case Study: Compressor Controls Corporation WLAN Security," Creative Component for Master of Science in Information Systems. Completed Summer 2008, Member.
38. Laux, Dawn. "A study of Biometric Authentication Adoption in the Credit Union Industry," Thesis for Master of Science in Information Systems, Iowa State University. Completed Spring 2007, Member.
39. Aguiar Zaffaroni, Laura "Measuring Preference for Virtual Teams: Scale Development and Validation," Thesis for Master of Science in Information Systems, Iowa State University. Completed Spring 2006, Chair.
40. Pilson, Christopher. "PIRANHA: A methodology of detecting covert communication via image-based steganography," Thesis for Master of Science in Information Assurance, Iowa State University. Completed Spring 2005, Member.
41. Colvin, Chris. "A Basic Framework and Overview of a Network-based RAID-like Distributed Backup and File Storage System: NetRAID" Thesis for Master of Science in Information Assurance, Iowa State University, Completed Spring 2005, Member.
42. Haubrich, Jeremy, "Radio Frequency Identification for Tracking Evidence in a Forensic Crime Lab," Creative Component for Master of Science in Information Systems. Completed Spring 2005, Member.
43. Luse, Andy. "Roaming user-based distributed firewalls," Thesis for Master of Science in Information Assurance, Iowa State University, Completed Spring 2005, Member.

44. Kiseleva, Ksenia. "Security Threat Assessment the Iowa Crime Lab Wireless Operating Environment," Creative Component for Master of Science in Information Assurance, Iowa State University, Completed Spring 2004, Member.
45. Gupta, Anuj. "SOX & keeping track of scores: A Documentation Methodology," Creative Component for Master of Science in Information Assurance, Iowa State University. Completed Spring 2004, Member.

## **UNDERGRADUATE HONORS RESEARCH PROJECTS**

1. Fishel, Amanda, Implementing Geographic Information Systems in the College of Business," Completed Fall, 2017, Advisor
2. Dong, Trong Duc, "E-Commerce," Completed Fall, 2010, Advisor.
3. Schlapkohl, Kyle. "MIS Image Management," Completed Spring 2007, Advisor.
4. Padleckas, Craig. "Outsourcing and its effect on MIS graduates," Completed Spring 2006, Advisor.

## **TEACHING EXPERIENCE**

*At Iowa State University*

*MIS 301 (Undergraduate) "Introduction to Management Information Systems"*

The role of information technology in organization. Overview of methodologies for design and development of systems including decision support systems, expert systems, data bases, end-user computing, etc. Computer applications relate concepts to practice. Lecture and laboratory work emphasizes the enabling role of IT in contemporary organizations.

*MIS 320 (Undergraduate) "Database Management Systems"*

Database design, development, and implementation. Focus on data models, both classical and object oriented. Uses relational and/or object oriented database management systems.

*MIS 407 (Undergraduate) "Advanced Business Programming"*

Design, writing, debugging and testing of computer programs for business applications, and managerial decision-support. Topics include OO programming and database connectivity.

*MIS 435 (Undergraduate) "Information Systems Infrastructure"*

Overview of Internet and telecommunications technology used in business applications. Understand Internet and network protocols, network and application architectures, design, and implementation.

*MIS 439 (Undergraduate) "Computer-based Decision Support Systems and Data Analytics"*

This course explains the characteristics, use, and development of decision support systems (DSS) within the context of other business information systems. The process of designing and implementing decision support systems in business is discussed from both theoretical and practical standpoints. Students will learn various ways of measuring the success of DSS implementation as well as the difficulties associated with all such measures. Students will learn to use common software tools to develop a simple DSS.

*MIS 440 (Undergraduate) “Supply Chain Information Systems”*

Technology continues to drive the way companies do business. With the ubiquity of the Internet came e-commerce and online marketing. Now organizations are working to establish c-commerce (collaborative commerce). The challenge faced by management is to remove traditional barriers within and across companies, whether geographical, departmental, personnel, customer, vendor, distributor or business partner with the goal to seamlessly integrate the entire supply chain. This class studies the technologies that organizations are using to create c-commerce systems, the challenges the organizations face, solution methodologies, and current practices.

*MIS 501 (Full Time MBA, Part Time MBA, and Executive MBA) “Management Information Systems”*

This course exposes the student to current theories and practices appropriate for understanding the role and application of information systems for individuals, organizations, and society within a globally competitive context. The course focuses on information technology and its uses in improving work practices, products, and tools for individuals and organizations. The course also addresses issues pertaining to current and emerging topics in the development and use of technology, the role of technology in and its alignment with organizational strategy and sustainable business practices, information system planning and the development of enterprise architectures, and human interface and personal characteristics in the design and use of technology.

*BUSAD 502 (Graduate) “Quantitative Analysis for Business and Decision Models”*

Introduction to the sources and statistical analysis of data and optimization models for use in making business decisions. Data collection, descriptive and inferential statistics including hypothesis testing, analysis of variance, multiple regression, linear programming and simulation.

*MIS 531 (Graduate) “Business Software Development”*

A survey of business-oriented programming languages with emphasis on design, writing, debugging and testing of computer programs for business transaction processing, and managerial decision-support. Topics include structured programming and file processing.

*MIS 539 (Graduate) “Computer-based Decision Support Systems and Data Analytics”*

This course explains the characteristics, use, and development of decision support systems (DSS) within the context of other business information systems. The process of designing and implementing decision support systems in business is discussed from both theoretical and practical standpoints. Students will learn to use common software tools to develop a simple DSS.

*MIS 539 (Graduate) “Cybersecurity Analytics”*

This course focusses on the challenges of achieving the “cybersecurity situational awareness” needed to identify and repel cyberattacks. The course will explore: methodologies used in recent cyber-attacks; philosophies of active cyber defense methods; contemporary network and systems monitoring tools and the log data they produce; and analysis and predictive methods that can be applied to diverse and large log datasets to help understand what has happened in the past and what is happening now.

*MIS 548 (Graduate) “Applications of Machine Learning for Business Intelligence”*

This course serves to introduce and apply data science concepts into business applications. As Big

Data, Machine Learning, Business Analytics, Business Intelligence and other concepts grow in business applications, it is essential for students to understand the underlying concepts, data, models, and applications to be successful in data-driven world. Students will learn how to determine problem types, data restrictions, model selection, tool choice, and analysis of data science concepts for greater business value.

*MIS 604 (PhD) “Doctoral Seminar on Collaboration, Knowledge, and Intelligence in Organizations”*

This Ph.D. seminar course addresses research issues in the emerging areas of collaboration, knowledge management, and enterprise intelligence. Topics will include emerging and contemporary concepts around knowledge management at individual, team, and organizational levels.

*Consortium Institute of Management and Business Analysis*

*6K:070 “Computer Analysis”*

The role of information technology in organization. Overview of methodologies for design and development of systems including decision support systems, expert systems, data bases, end-user computing, etc. Computer applications relate concepts to practice. Lecture and laboratory work emphasizes the enabling role of IT in contemporary organizations.

*6K:192 “Supply Chain Management”*

This course acquaints students with various supply chain activities and describes how supply chain management integrates supply and demand, both within and between firms. Students are exposed to a wide range of supply chain management terminology, analytical tools, and theories related to four key elements of supply chain management: purchasing, operations, distribution, and integration.

*At Virginia Polytechnic Institute and State University*

*BIT 4444 (Undergraduate) Computer-based Decision Support Systems*

Study of interactive, computer-based systems used to support managers. Emphasizes the study of expert systems and artificial intelligence and the use of knowledge in making managerial decisions.

*BIT 5495 (Graduate level) “DSS Design and Implementation”*

Study of the design and implementation of decision support systems (DSS) using visual environment. Topics will include methods for data access, modeling and computation in a visual language, graphical display of support material and report generation methodologies, object sharing between software components, and the deployment of support systems, and common object model methodologies.

**SERVICE**

*At Iowa State University*

- Ivy College of Business Dean's Cabinet, member (2019–present)
- Computer Curriculum Coordination committee, member (2012–2015, 2018–2021)
- MBA core faculty, member (2016–2019)
- MIS faculty search committee, chair (2017–2018)
- ISU Grand Challenge committee, member (2016–2017)
- ISU Awards for Department Leadership committee, member (2015–2016)
- Executive Committee, Executive Advisory Council, MIS representative (2014–2019)
- Computational Advisory committee, college chair, university member (2014–2015)
- MIS doctoral committee, area chair (2013–2015)
- Advisor for the MIS club (2011–2015)
- College Promotion and Tenure committee, chair (2013–2014)
- MIS faculty search committee, member (2013–2014, 2016)
- Supply Chain faculty search committee, member (2013–2014)
- College Promotion and Tenure committee, member (2012–2013)
- MIS doctoral committee, member (2012–2013)
- MIS curriculum task force, lead (2012–2013)
- Academic standards committee, chair (2010–2012)
- MIS faculty search committee, chair (2010–2011)
- Advisor for ISU Racquetball club (2007–2011)
- Academic standards committee, member (2010)
- Undergraduate outcomes assessment committee (2009–2010)
- University IT policy committee, member (2005–2009)
- Member of ad hoc computation advisory committee (2008)
- Business learning community faculty mentor (2005–2008)
- Preparing future faculty program faculty mentor (2005–2006)
- MIS faculty search committee, member (2003–2004)

## **EXTERNAL SERVICE AND CITIZENSHIP**

### *Journal editor positions*

- Associate editor for Decision Sciences Journal (2011–present)

### *Journal editorial review board service*

- Journal of Business Logistics (2011–present)
- Journal of the Midwest Association for Information Systems (2016–present)

### *Professional Service*

- Vice President, Region 1, Association for Information Systems (2023–present)
- Chair, AMCIS Program Chair Subcommittee (2022–2023)
- Program co-chair, Americas' Conference on Information Systems (2021–2022)
- At-Large Director, Midwest Association for Information Systems (2021–2023)
- Executive Committee, Americas' Conference on Information Systems (2021–2023)
- Past-President, Midwest Association for Information Systems (2017)
- Information Security Track Chair, 48<sup>th</sup> Annual Meeting of the Decision Sciences Institute (2017)
- President, Midwest Association for Information Systems (2016)
- President-elect, Midwest Association for Information Systems (2015)
- Program co-chair: The 13th Annual Big XII+ MIS Research Symposium (2015)



- Program co-chair: The 9th Annual Midwest Association for Information Systems Conference (MWAIS) (2014)

#### *Peer reviews*

- Communications of the Association for Information Systems
- Computer Communications
- Computers in Human Behavior
- Decision Sciences Journal
- Decision Support Systems
- IEEE Computer
- IEEE Engineering Management Review
- IEEE Internet Computing
- IEEE Transactions on Engineering Management
- IEEE Transactions on Knowledge and Data Engineering
- ICIS and AMCIS
- Information and Software Technology
- Information Systems Frontiers
- Information Systems Journal
- INFORMS Transactions on Education
- Interfaces
- International Journal of Electronic Marketing & Retailing
- International Journal of Physical Distribution and Logistics Management
- International Journal of Production Research
- Journal of Business Logistics
- Journal of the Midwest Association for Information Systems
- Journal of Management Information Systems
- Journal of Organizational Computing and Electronic Commerce
- Production and Operation Management
- Project Management Journal

#### *Special awards and honors*

- Outstanding Paper in the Emerald Literati Awards (2019)
- Highest cited paper in International Journal of Production Research (2018)
- MBA Executive Advisory Council Teaching Excellence Award (2018)
- Nominated for Senior Faculty Teaching Award in College of Business (2014–2017)
- Nominated for Junior Faculty Research Award in College of Business (2010)
- Recognized as an outstanding faculty member by the Greek Community (2006, 2013, 2014)
- R. B. Pamplin Doctoral Student Fellowship (2000)
- Southeastern INFORMS Ph.D. Student Paper Competition award winner (2001)

#### *Professional affiliations*

- Association for Information Systems (AIS)
- Decision Sciences Institute (DSI)

*Industry engagement*

- Faculty Externship in the Analytics and Data Warehouse group at Boeing (2015)

*Certifications*

- Certified SAFe® 4 Practitioner (2018-2019)